17. The method of claim 1 or 5, wherein said left and right T-DNA border sequences are derived from TL-DNA of octopine plasmid pTiA6.

18. The method of claim 1 or 5, further comprising a selection marker for incorporation of heterologous DNA into said vector.

19. The method of claim 1 or 5, wherein said selection marker comprises a sacB gene, and wherein when heterologous DNA is inserted into unique restriction endonuclease cleavage site of said vector, said sacB gene is inactivated.

20. The method of claim 1 or 5, further comprising a selection marker for introduction of said heterologous DNA into *Escherichia coli.*

21. The method of claim 1 or 5, wherein said selection marker comprises a kanamycin resistance gene.

22. The method of claim 6, further comprising a selection marker for the introduction of said heterologous DNA into *Agrobacterium tumefaciens.*

21. The method of claim 1 or 5, further comprising a selection marker for introduction of said heterologous DNA into a non-plant eukaryotic cell, said selection marker located between said left and right T-DNA border sequences.

22. The method of claim 1 or 5, wherein said selection marker is located adjacent to said left T-DNA border sequence.

23. The method of claim 21, wherein said kanamycin resistance gene comprises a GUS-NPTII gene.

24. The method of claim 20, wherein said selection marker comprises a hygromycin resistance gene.

25. The method of claim 1 or 5, wherein said backbone further comprises an origin of conjugal transfer.

26. The method of claim 25, wherein said origin of conjugal transfer comprises an oriT origin from plasmid RK2.

27. A non-plant eukaryotic host cell containing a vector, said vector comprising:

a) a backbone which includes a first origin of replication capable of maintaining heterologous DNA as a single copy in *Escherichia coli* host cell;

b) a unique restriction endonuclease cleavage site for insertion of heterologous DNA; and

c) left and right *Agrobacterium* T-DNA border sequences flanking said unique restriction endonuclease cleavage site, said left and right T-DNA border sequences allowing introduction of heterologous DNA located between left and right T-DNA border sequences into a non-plant host cell;

d) a heterologous DNA inserted at said unique restriction endonuclease cleavage site; and

e) a second origin of replication capable of maintaining heterologous DNA as a single copy in an *Agrobacterium tumefaciens* host cell.

28. The non-plant eukaryotic host cell of claim 27, wherein the host cell is a yeast cell.

29. The non-plant eukaryotic host cell of claim 27, wherein the host cell is a mammalian cell.

30. The host cell of claim 27, wherein the heterologous DNA is from a eukaryotic cell.

31. The host cell of claim 27, wherein the heterologous DNA is from a prokaryotic cell.

32. A method of isolating a DNA encoding a desired gene product from a genomic library of DNA comprising:

a) inserting heterologous DNA from a genomic library of DNA into a vector, said vector comprising:

i) a backbone which includes a first origin of replication capable of maintaining heterologous DNA as a single copy in *Escherichia coli* host cell;

ii) a unique restriction endonuclease cleavage site for insertion of heterologous DNA; and

iii) left and right *Agrobacterium* T-DNA border sequences flanking said unique restriction endonuclease cleavage site, said left and right T-DNA border sequences allowing introduction of heterologous DNA located between left and right T-DNA border sequences into a non-plant host cell;

b) introducing the resulting vector, into said non-plant host cell; and

c) expressing said heterologous DNA in said non-plant host cell so as to produce the gene product encoded by said heterologous DNA,

d) screening the cultured host cells for those cells that express the desired gene product, and

e) isolating the DNA encoding the desired gene product from those cells that express the desired gene product.